

ASHES and IRON

for amplified solo soprano saxophone, amplified saxophone ensemble, electro-acoustic percussion boards, amplified flower pot xylophones, theremin ensemble and live electronics

by

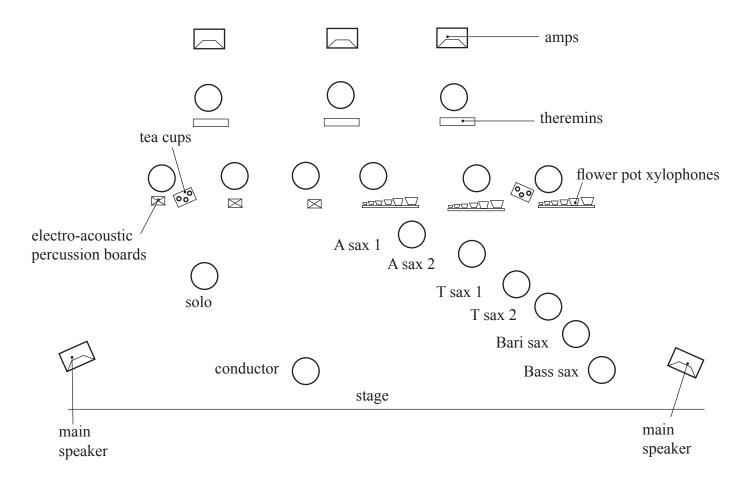
Barry R. Morse

Instrumentation:

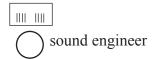
solo B-flat soprano saxophone, amplified

- 2 E-flat alto saxophones, amplified
- 2 B-flat tenor saxophones, amplified
- 1 E-flat baritone saxophone, amplified
- 1 B-flat bass saxophone, amplified
- 3 electro-acoustic percussion boards (3 players), amplified
- 3 flower pot xylophones (3 players), amplified
- 3 theremins, amplified
- 1 sound engineer/electronic effects

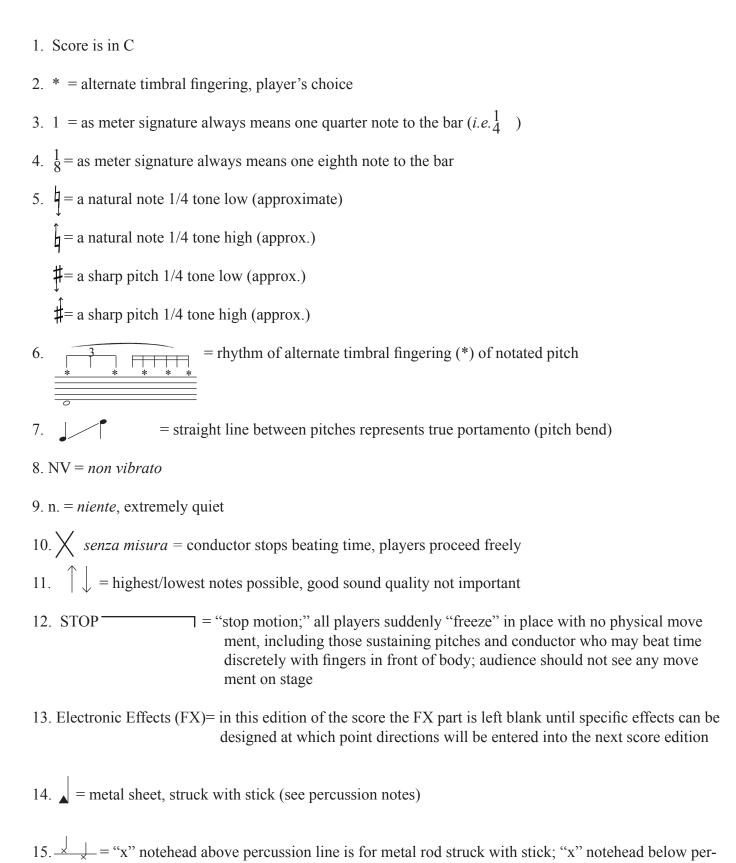
One Possible Set-up:



audience



General Performance Notes:

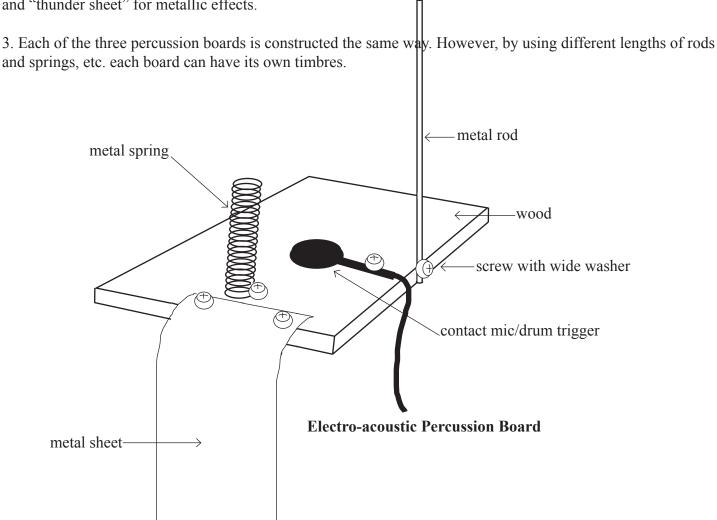


cussion line is for metal spring; regular notehead on lower percussion line is always wood

struck with stick or mallet (see percussion notes)

Special Percussion Notes:

- 1. The percussion instruments are of three (3) kinds, all requiring amplification. The first kind is the group of (ideally) three (3) "electro-acoustic percussion boards" played by three (3) players with sticks and/or small, hard mallets. The second kind is the group of (ideally) three (3) "flower pot xylophones" played with hard rubber mallets. The third group is two (2) sets of three (3) porcelain tea cups or rice bowls played with sticks.
- 2. Each electro-acoustic percussion board consists of a small panel or block of wood (pine) 3.5" x 6" (approx.) with at least one (1) short metal rod, at least one (1) metal spring and a thin flexible sheet of metal firmly attached (a washer held tight with a screw will work). A contact mic or "drum trigger" is also firmly attached to the wood. The percussion board can then have a threaded flange attached underneath to screw onto a mic stand or it can be clipped to a mic/music stand etc. The contact mic is then plugged into a mixer or amplifier with a long instrument cable. The player merely taps the percussion board for the "wood" effect and the rod, spring and "thunder sheet" for metallic effects.



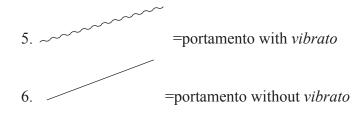
- 4. Each flower pot xylophone is a set of six (6) clay pots arranged low to high using large to small pots attached by bolts through the drainage holes and wide washers inside to firmly hold the pot onto a 2"x 4" pine board. Attached to the board is a contact mic, or alternatively, no contact mic but rather the whole instrument is close miked, with the usual microphone (e.g. Shure SM 57, etc.). The set of six (pots) attached to the board can then be C-clamped to two sturdy mic stands, chairs, etc. The pots are played by striking the rims with hard rubber mallets (exact hardness to be worked out by performaers and conductor for best sound).
- 5. Each xylophone should have six (6) graded pots from low to high (big to small) but not necessarily the exact same sizes nor "pitches." In fact, it is desireable that corresponding pots on all three instruments create a micro-tonal cluster, rather than be pitched all the same.
- 6. One player from each of the above mentioned groups is also instructed to play three (3) "tea cups." These should be porcelain Japanese/Chinese type cups or rice bowls. Those chosen should produce clear ringing bell-like pitches that are not tuned to the 12-tone equal tempered scale. No two cups should have the same pitch and each cup should be micro-tonally pitched. Water poured into the cup/bowl can help to "de-tune" it.
- 7. Tea cups should be placed on a flat surface such as a solid music stand with a soft, thin cloth underneath them. The cloth should not dampen tea cups' resonance but should prevent any banging noises caused when cups are tapped and they bump against metal music stand or table.

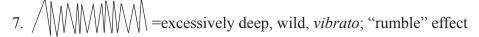
8. Pitches should be arranged so that the players' pitches interlock as in the diagram.



Special Theremin Notes:

- 1. One (1) theremin is better than none; two (2) is even better; three (3) are best. Theremins are the "space-controlled" variety (e.g. Big Briar/Moog Music "Etherwave" model, etc.). They should be models with significant volume and pitch control: beware of "toy" theremins. Each theremin shound have its own amplifier situated immediately behind him so that the player can hear himself. If the instruments are plugged directly into a sound system a great deal of control is lost.
- 2. The parts are written without concern for exact pitches. In a few places the players are asked to match pitch with a saxophone if at all possible. If the players can hear the saxophones (and the should) then they can quietly glide up to any pitch they hear after it has already been sounded: they never have to pluck an exact pitch out of thin air. Even if they miss the pitch they should play with confidence on the note they land on and should never waver around hunting for the right tone.
- 3. Space controlled theremins are micro-tonal instruments without physical feed-back to the player and should not be expected to play "in tune." The conductor and other players should never chide the theremins for being "out-of-tune" and at all costs rehearsal time should never be wasted trying to make them play "in tune." In fact, the parts are written to allow for indeterminate micro-tonal clusters, and some "out-of-tuneness" with saxophones is allowable.
- 4. The only forbidden action is to waver around on a pitch that is meant to be sustained.





8. *vibrato* = normal, expressive *vibrato* to add warmth to tone

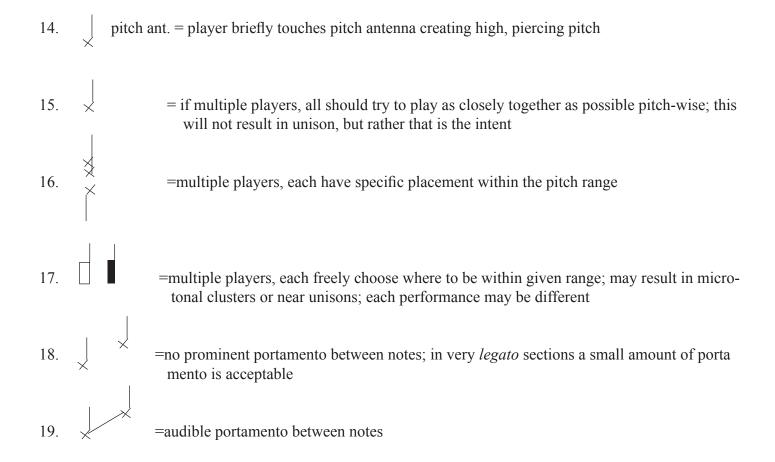
9. *molto vibrato* =nervous, "sci-fi" effect

10. NV = no *vibrato* to be used

=vertical lines on portamento are for orientation only and do not imply stopping the sound, re-attacking or doing anything audible other than the notated portamento

12. 🏌 = indicates the end of portamento, do not reattack

=players may play any pitch within the box, not with others; may result in a micro-tonal chord or cluster



Special Sound Engineer/Electronic Effects Notes:

- 1. The sound engineer will set up the microphones and run a mixer set well into the audience in order to hear the ensemble and make balance adjustments. Xylophones may be miked with either contact mics or traditional microphones, whichever sounds best. Saxophones can be miked individually or as a group, whichever sounds best.
- 2. Some instruments will have an acoustic component to the sound. This should be taken into consideration when determining balance issues.
- 3. Electronic effects should be designed by the sound engineer and composer. These may include but not be limited to distortion, delay, ring modulation, timbral modifications, etc. The effects should enhance the performance and be used judiciously, never over-done.
- 4. Specific effects directions will be written into the FX part in the score once they are designed and practiced. For this edition of the score the part has been left blank.

Compositional Notes:

- 1. Rhythms, pitches and phrase structures are derived from the number sequence 2173695328. The basic melodic-harmonic material is: C#-C-F#-D-F-G#-E-D-C#-G.
- 2. Each instrumental section has its own pitch or timbral rules: the saxophone section uses mainly 12-tone equal tempered pitches and normal fingerings for standard tone; the soloist uses 1/4 tones within the equal tempered system and alternate fingerings for timbral changes to tone. The theremins use all micro-tone possibilities outside the equal tempered system with harmonies being indeterminate at performance. Flowerpot xylophones and tea cups are micro-tonally pitched. The percussion boards are unpitched and should not be unified as to timbre. Thus the full range from unpitched to micro-tones to specific 1/4 tones to specific 12-tones is utilized. Specific notation and indeterminate notation are used. Each section uses massed sounds and solo sounds and the full range of pitches from bass saxophone to soprano saxophone are used.
- 3. Additionally, both old electronic technology (theremins) and new technology (FX) are employed for a kind of retro-contemporary sound. The saxophones both harken back to the Jazz Age and Machine Age on the one hand and possibilities for future exploration on the other.

Duration: approx. 9'00"-10'00"

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